

# **Table of Contents**

The 27th Priority List Planning Process	3
Candidate Projects located in Region 1	
Point aux Marchettes Shoreline Protection	8
Bayou Cane Marsh Creation	10
Candidate Projects located in Region 2	
East Delacroix Marsh Creation and Terracing	13
Mid Breton Landbridge Marsh Creation and Terracing	15
Breton Landbridge Marsh Creation (West)	17
Grand Bayou Ridge and Marsh Restoration	19
Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection	21
Candidate Projects located in Region 3	
East Catfish Lake Marsh Creation and Shoreline Protection	23
North Bayou Decade Ridge Restoration and Marsh Creation	25
Candidate Projects located in Region 4	
Sabine Marsh Creation Cycles 6&7	27
Candidate Evaluation Matrix	31



# Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Priority Project List (PPL) Selection Process

# **Project Nominations**

The 4 Regional Planning Teams (RPTs), consisting of representatives from the CWPPRA agencies and the coastal parishes located in those regions, will meet to propose projects to be included on the new PPL. Project nominations will be accepted in all the hydrologic basins below. *All proposals must be consistent with the 2012 State Master Plan and the draft 2017 State Master Plan to be considered as possible nominees; therefore, those wishing to propose projects are encouraged to work with representatives of the Louisiana Coastal Protection and Restoration Authority prior to the RPT meetings to develop projects that are consistent. A lead agency will be assigned to each nominated project to prepare preliminary project support information (factsheet, maps, and potential designs, and benefits).* 



- Project nominations that provide benefits or construct features in more than one basin shall be presented in the basin receiving the majority of the project's benefits.
- Multi-basin projects can be broken into multiple projects to be considered individually in the basins which they occur.
- Project nominations that are legitimate coastwide applications will be accepted separate from the 8 basins at any of the 4 RPT meetings.

If similar projects are proposed within the same area, the RPT representatives, including the CWPPRA agencies and *only* the parishes located within the project's basin, will determine if those projects are sufficiently different to allow each of them to move forward. If not sufficiently different, such projects will be combined into one project nominee, and the federal sponsor of the project will be determined prior to the coastwide electronic vote. This decision to either combine similar projects or allow each to move forward will be made at the RPT meeting where the similar projects are proposed.

Prior to voting on project nominees, the Environmental Work Group (EnvWG) and Engineering Work Group (EngWG) will screen coastwide project and demonstration project nominations to ensure that each qualifies for its respective category as set forth in the CWPPRA Standard Operating Procedures (SOP).

Nominees	Basin
4	Barataria
4	Terrebonne
3	Breton Sound
3	Pontchartrain
2	Mermentau
2	Calcasieu/Sabine
2	Teche/Vermilion
1	Atchafalaya
1	Coastwide
22	TOTAL

# **Coastwide Electronic Vote**

The RPTs will vote after the individual RPT meetings via email to select nominee projects. The RPTs will select projects per basin based on land loss rates (see table on left) and up to 6 demonstration projects.

During the RPT meetings, all CWPPRA agencies and parishes will be required to provide the name and contact information for the official representative who will vote to select nominee projects. Each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote.



# **Preliminary Assessment of Nominated Projects**

Agencies, parishes, landowners, and other individuals will informally confer to further develop projects. The lead agency designated for each nominated project will prepare a brief project description that discusses possible features. Factsheets will also be prepared for demonstration project nominees.

During this preliminary assessment, the EngWG and EnvWG meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups also review the nominated demonstration projects. If it is determined that a demonstration project is unlikely to be utilized in restoration or has been evaluated previously, the Work Groups may recommend to the Technical Committee that these projects not move forward.

The P&E Subcommittee prepares a matrix of cost estimates and other pertinent information for nominees and demonstration project nominees.

# **Selection of Phase 0 Candidate Projects**

The selection of the Phase 0 candidate projects occurs at the spring Technical Committee meeting. The Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. They will select 10 candidate projects regardless of basin and may select up to 3 demonstration project candidates for detailed assessment by the EngWG, EnvWG, and Economic Work Group (EcoWG).

# **Phase 0 Analysis of Candidate Projects**

During Phase 0 analysis, the EngWG, EnvWG and Academic Advisory Group meet to refine project features and develop boundaries for the project and extended boundaries for estimating land loss.

The sponsoring agencies coordinate site visits for each project to observe the conditions in the project area. There will be no site visits conducted for demonstration projects. The sponsoring agencies develop draft WVAs and prepare Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates, using formats approved by the applicable work group. Demonstration project candidates will be evaluated as outlined in Appendix E of the SOP.

The EngWG reviews and approves Phase 1 and 2 cost estimates, the EcoWG reviews cost estimates and develops annualized (fully funded) costs, and the EnvWG reviews and approves all draft WVAs.

The Corps of Engineers staff prepares an information package for Technical Committee review and public distribution consisting of:

- 1) Updated project factsheets;
- 2) A matrix that lists projects, fully funded cost, average annual cost, WVA results in net acres and Average Annual Habitat Units (AAHUs), and cost effectiveness (average annual cost/AAHU);
- 3) A qualitative discussion of supporting partnerships and public support.

# Selection of the PPL

The selection of the PPL will occur at the winter Technical Committee and Task Force meetings. The Technical Committee meets and considers matrix, project factsheets, and public comments, then recommends up to 4 projects and up to one demonstration project for selection to the PPL. The Task Force will review the Technical Committee recommendations and determine which projects will receive Phase 1 (design) funding for the PPL.

Once a project completes Phase I, Phase II (construction) funding must be requested from the Task Force and much of the evaluation is updated using additional information gained since original analysis.



Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) PPL 27 Schedule

January 31, 2017	Region IV Planning Team Meeting (Abbeville)
February 1, 2017	Region III Planning Team Meeting (Morgan City)
February 2, 2017	Regions I and II Planning Team Meetings (Lacombe)
March Coastwide RP	T Electronic Vote
March/April 2017	Agencies prepare factsheets for RPT-nominated projects
March/April 2017	Engineering/Environmental Work Groups review project features, benefits, & prepare preliminary cost estimates for nominated projects (Baton Rouge)
April 2017	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates and benefits
April 27, 2017	Spring Technical Committee Meeting, select PPL 27 candidate projects (New Orleans)
May/June 2017	Candidate project site visits
May 11, 2017	Spring Task Force Meeting (Lafayette)
July/August/ September 2017	Eng/Eng/Econ Work Group project evaluations
September 14, 2017	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)
October 12, 2017	Fall Task Force Meeting, O&M and Monitoring approvals (New Orleans)
October 2017	Economic, Engineering, and Environmental analyses completed for PPL 27 candidates
December 7, 2017	Winter Technical Committee Meeting, recommend PPL 27 and Phase I and II approvals (Baton Rouge)
January 2018	Winter Task Force Meeting, select PPL 27 and approve Phase II requests (New Orleans)

# \*DATES SUBJECT TO CHANGE\*

Visit www.lacoast.gov/calendar for up-to-date information regarding meetings dates, times, & locations.

# **Candidate Projects Located in Region 1**

# **PPL27** Point aux Marchettes Shoreline Protection

### **Project Location:**

Region 1, Pontchartrain Basin, St. Bernard Parish, Lake Borgne and Biloxi Marshes

### **Problem:**

Historic wetland loss in the area was mainly caused by shoreline erosion. Based on the hypertemporal analysis conducted by USGS to detect land change trends from 1984 to 2016, the interior loss rate for the Biloxi Marsh area was calculated to be -0.48 %/yr. Using maps from 1998 and 2016, Lake Borgne shoreline erosion rates were calculated along the Biloxi Marshes Wildlife Management Area in the vicinity of Point aux Marchettes between Lakeshore Bayou and Bayou Grande. Shoreline erosion rates in that area average from 23 ft./yr. to 32 ft./yr. A 23,783 LF section of shoreline was estimated to have an average erosion rate of 29 ft./yr. It is estimated that without the project there would be loss of 275 acres of pristine natural marsh, bayous and associated ridges, shallow open water and ponds due to shoreline erosion.

### **Goals:**

The project goals are to 1) protect approximately 23,783 feet of critical shoreline, 2) protect approximately 138 acres of natural highly productive brackish and saline marsh and ridge habitat, and 3) protect 124 acres of bayous and small marsh ponds.

### **Proposed Solution:**

The proposed project would: 1) Construct approximately 20,947 LF of a foreshore rock dike along a portion of the southern Lake Borgne shoreline. Rock would be placed on geotextile cloth at the -2ft contour and stacked to a settled height of +2.5 ft. above existing marsh (+0.68 ft. NAVD 88 Geoid12A).

# **Project Benefits:**

The project would result in approximately 138 net acres over the 20-year project life.

### **Project Costs:**

The total fully-funded cost is \$42,889,765.

# **Preparer of Fact Sheet:**

Robert Dubois, FWS, Robert Dubois@fws.gov, 337-291-3127



Image Source: 2016 DOQQ

# **PPL27 Bayou Cane Marsh Creation**

# **Project Location:**

Region 1, Lake Pontchartrain Basin, St. Tammany Parish (on Big Branch NWR)

# **Problem:**

The marshes along the north shore of Lake Pontchartrain have experienced substantial losses during recent hurricanes. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, loss rates in the project area are estimated to be -0.91% per year for the period 1984 to 2016.

# **Goals:**

The primary goal of this project is to restore marsh habitat in large open water areas located adjacent to the edge of Lake Pontchartrain to preclude future breaching of the lake into those interior waters.

The specific goal of the project is create 384 acres of marsh and nourish 65 acres of existing marsh with material dredged nearby from Lake Pontchartrain.

# **Proposed Solution:**

Sediments from Lake Pontchartrain will be hydraulically dredged and pumped via pipeline to create/nourish approximately 499 acres of marsh located in 7 separate cells. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Perimeter containment dikes will be constructed. Containment dikes will be gapped at the end of construction or by target year 3.

# **Project Benefits:**

The project would result in approximately 356 net acres over the 20-year project life.

# Project Costs:

The total fully-funded cost is \$33,991,838

# **Preparer of Fact Sheet:**

Ronny Paille, FWS, Ronald Paille@fws.gov, 337-291-3117



# **Candidate Projects Located in Region 2**

# PPL27 East Delacroix Marsh Creation and Terracing

# **Project Location**

Region 2, Breton Basin, St. Bernard Parish

### Problem

Hurricanes Katrina and Rita caused the majority of wetland loss in the project area. Wind erosion and saltwater intrusion have resulted in loss of marsh vegetation and wetland soils. Marsh loss has increased exposure of Delacroix to flooding from the east/southeast. The 1984 to 2016 USGS loss rate is -1.72%/yr for the extended project boundary area.

### Goals

The project goal is to create and nourish approximately 406 acres of marsh (347 acres creation 59 acres nourishment) and construct approximately 12,950 linear feet of terraces (approximately 8 acres) utilizing a layout to help protect the community of Delacroix.

### **Proposed Solution**

Sediment would be hydraulically dredged from Lake Lery and placed in two confined disposal areas creating 347 acres of marsh and nourishing 59 acres of existing marsh. Two creation cells allow a channel for the existing pump station. Approximately 12,950 ft of earthen terraces would be constructed and planted in one row per side and on the crown. Created marsh will not be planted. Containment dikes will be gapped no later than three years after construction. The cost includes maintenance dredging of the pump station channel at year 10. Material would be stacked on remnant dikes along the channel so as not to fill marsh.

# **Project Benefits:**

The project would result in approximately 307 net acres over the 20-year project life.

# **Project Costs:**

The total fully funded cost is \$35,821,393.

### **Preparer(s) of Fact Sheet:**

Twyla Cheatwood, NOAA Fisheries, 225-389-0508, twyla.cheatwood@noaa.gov



# East Delacroix Marsh Creation and Terracing (PPL27 Candidate)



Map ID: 2017-11-0041 Map Date: August 14, 2017









Map Produced By: U.S. Department of the Interior U.S. Geological Survey National Wetlands Research Center Coastal Restoration Assessment Branch Baton Rouge, LA

> Image Source: 2016 DOQQ

Scale: 1:35,000

# PPL27 Mid Breton Land Bridge Marsh Creation and Terracing

# **Project Location:**

Region 2, Breton Sound Basin, Plaquemines Parish, west of Delacroix along Bayou Gentilly

# **Problem:**

From 1932 to 1990, the Caernarvon Mapping Unit lost 14,240 acres of its marsh. Prior to Hurricane Katrina, the greatest lost documented occurred between 1956 and 1974 and coincided with Hurricane Betsy and extensive canal building. Hurricane Katrina in 2005 devastated the area resulting in substantial marsh loss. According to USGS Open File Report (2006-1274), approximately 39 square miles of marsh around the upper and central portions of Breton Sound were converted to open water by mechanical removal of the marsh or by marsh submergence. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, the loss rate in the project area is estimated to be -1.99 %/year for the period 1984 to 2016.

# **Goals:**

The primary goal of this project is to restore marsh habitat in open water and in deteriorated marsh between the Bayou Terre aux Boeufs and River aux Chenes ridges through placement of sediment via hydraulic dredging.

Specific Goals: 1) create approximately 421 acres of intertidal marsh and nourish an additional 30 acres with material dredged from Lake Lery, and 2) create approximately 22,960 LF of terraces (17 acres of marsh) in strategic areas to reduce erosion due to wind induced waves and trap sediments from Caernarvon Freshwater Diversion that pass through Lake Lery and into Lost Lake.

# **Proposed Solution:**

Sediments from a Lake Lery borrow site will be hydraulically dredged and pumped via pipeline to create/nourish approximately 451 acres of marsh. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Perimeter containment dikes will be constructed. Containment dikes will be gapped at the end of construction or by target year 3.

Approximately 22,960 LF of terraces (17 acres of marsh) will be created with long reach excavators in strategic areas. This will reduce erosion due to wind induced waves and help trap sediments that flow through Lake Lery and Lost Lake.

# **Project Benefits:**

The project would result in approximately 364 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$40,874,564.

# **Preparer of Fact Sheet:**

Robert Dubois, FWS, Robert Dubois@fws.gov, 337-291-3127



# PPL27 Breton Landbridge Marsh Creation (West), River aux Chenes to Grand Lake

# **Project Location:**

Region 2, Breton Basin, Plaquemines Parish

# **Problem:**

Historically, this area was nourished by the freshwater delivered by the Mississippi River until the creation of the levees along the lower river. In 1991, the Caernarvon Freshwater Diversion began delivering freshwater to the marshes in the area. The major cause of wetland loss has been to storm activity (i.e. Hurricanes Betsy and Katrina), causing both storm-induced scouring and salt water intrusion. Altered hydrology and oil/gas development have exacerbated this loss. High subsidence rates range from 2.1-3.5 ft/century. Natural lakes and bays increase in size due to coalescence with marsh lost to water and increased wave fetch. The 1984 to 2016 USGS loss rate is -1.58%/yr for the extended boundary area.

# Goals:

The project goals are to restore 423 acres of marshes and bank lines along the south side of Grand Lake. The proposed first phase would address the critical reach of the landbridge by restoring the Grand Lake shoreline. This project is part of an overall, long-range, restoration goal which would create/nourish 1,000 to 2,000 acres of intermediate marsh across 7 miles of the Breton Basin from River aux Chenes to Bayou Terre aux Bouefs.

# **Proposed Solution:**

There will be 315 and 108 acres of marsh creation and marsh nourishment, respectively, via confined disposal in four disposal areas of sediment dredged from Grand Lake. Three disposal areas will be fronted by constructing a lakeside berm. The berm would be constructed with a combination of bucket dredge and marsh buggies. The lakeside slope of the berm would be planted with appropriate vegetation. The marsh creation acres would not be planted. The non-lakeside portions of the dikes will be gapped no later than three years post construction (i.e., the lakeshore berm would not be gapped). Data will be acquired from 224 additional acres to allow for robust alternatives analysis and/or upscaling the project during engineering and design.

The overall landbridge concept incorporates marsh and shoreline restoration in a west-to-east configuration across the basin to be completed in two to four phases. Once restored, the landbridge would reduce the potential for coalescence of Lake Lery with Grand Lake and Lake Petit.

# **Project Benefits:**

The project would result in approximately 282 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$ 34,661,276.

# **Preparer of Fact Sheet:**

Dawn Davis, NOAA-Fisheries, Dawn.Davis@noaa.gov, 225-389-0508



# PPL27 Grand Bayou Ridge and Marsh Restoration

# **Project Location:**

Region 2, Barataria Basin, Plaquemines Parish

# **Problem:**

Within the Lake Hermitage basin, between Bayou Grande Cheniere and the Mississippi River, significant marsh loss has occurred with the construction of oil/gas canals, subsidence, and sediment deprivation. From examination of aerial photography, the majority of this loss occurred during the 1960s and 1970s when numerous oil/gas canals were dredged in the area. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, the land loss rate in the project area is -1.65% per year for the period 1984 to 2016.

# **Goals:**

The primary goals of this project are; 1) restore marsh habitat in the open water areas via marsh creation and terracing and 2) restore forested ridge habitat along Grand Bayou.

Specific goals of the project are: 1) Create approximately 356 acres (344 acres of creation; 12 acres of nourishment) of marsh with dredged material from the Mississippi River; 2) create 25,000 linear feet (19 acres) of terraces; 3) Create 10,657 linear feet (13 acres) of forested ridge habitat.

# **Proposed Solution:**

Sediments from the Mississippi River will be hydraulically dredged and pumped via pipeline to create/nourish approximately 356 acres of marsh. The proposed design is to place the dredged material to a fill height of +1.1 ft NAVD88 (per the BA-42 Lake Hermitage Marsh Creation Project). Containment dikes will be gapped at the end of construction.

Approximately 25,000 linear feet of terraces (19 acres) will be constructed in open water areas west of Grand Bayou (Figure 1). Terraces will have a 15-ft crown width, a height of +2.5 ft NAVD88, and side slopes of 1(V):4(H). The terraces will be planted with seashore paspalum on the crown and smooth cordgrass on the side slopes.

Approximately 10,657 linear feet (13 acres) of forested ridge will be created along the western bank of Grand Bayou using material from the bayou. The ridge will be constructed to a crown elevation of +4.0 feet NAVD88, 25 feet wide, and will be planted on the crown and slopes.

# **Project Benefits:**

The project would result in approximately 304 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$40,122,416.

# **Preparer of Fact Sheet:**

Kevin Roy, FWS, Kevin Roy@fws.gov, 337-291-3120



# Grand Bayou Ridge and Marsh Restoration (PPL27 Candidate)



Map ID: 2017-11-0039 Map Date: August 08, 2017







Map Produced By: U.S. Department of the Interior U.S. Geological Survey National Wetlands Research Center Coastal Restoration Assessment Branch Baton Rouge, LA

> Image Source: 2016 DOQQ

Scale: 1:35,000

# PPL27 Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection

# **Project Location:**

Region 2, Barataria Basin, Jefferson Parish

# **Problem:**

Historic wetland loss in the area occurs in the form of shoreline erosion along Turtle Bay and interior marsh loss. The interior loss is caused by subsidence, sediment deprivation, and construction of access and pipeline canals. Based on the USGS analysis of the project's extended boundary, the land loss rate for the area is estimated to be -0.97% per year. Shoreline erosion along the northeast shore of Turtle Bay, in the area proposed to be addressed by this project, is approximately 5 feet per year. While this rate may not seem excessive, this reach of shoreline is very narrow and loss of this shoreline would connect Turtle Bay to a large lagoon, greatly altering the hydrology of the marsh.

# **Goals:**

The goals of the project are to 1) create approximately 377 acres of marsh and nourish approximately 300 acres of marsh (677 acres total) with dredged material from Turtle Bay, 2) protect approximately 2,870 feet of critical shoreline (5 acres saved over 20 years), and 3) prevent further enlargement of two primary water exchange points.

# **Proposed Solution:**

The proposed project would create approximately 377 acres and nourish approximately 300 acres of marsh using sediment dredged from Turtle Bay. Two types of containment will be utilized for this project: semi-contained and fully contained. For the semi-contained portion, there will be approximately 42 acres of marsh creation and 86 acres of marsh nourishment. For the fully contained portion, there will be approximately 335 acres of marsh creation and 214 acres of marsh nourishment. Containment dikes will be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands. Approximately 2,870 feet of critical shoreline would be protected and two channel liners would be installed to prevent further enlargement of two primary water exchange points. Maintenance of the shoreline protection feature and channel liners would be included. In case the area does not re-vegetate on its own, the maintenance cost estimate includes funds to plant 25% of the created marsh at Year 3.

# **Project Benefits:**

The project would result in approximately 372 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$44,109,317.

# **Preparer of Fact Sheet:**

Quin Kinler, USDA-NRCS, 225-665-4253 ext 110, quin.kinler@la.usda.gov



# **Candidate Projects Located in Region 3**

# PPL27 East Catfish Lake Marsh Creation and Shoreline Protection

# **Project Location:**

Region 3, Terrebonne Basin, Lafourche Parish

# **Problem:**

Significant marsh loss has occurred east and south of Catfish Lake. Causes of marsh loss include the construction of numerous oil/gas canals, subsidence, and sediment deprivation. Between Catfish Lake and the Golden Meadow Hurricane Protection Levee, very little marsh remains after the construction of an extensive network of oil/gas canals. Much of the remaining land in this area consists of spoil banks and isolated patches of marsh. From examination of aerial photography, the majority of this loss occurred during the 1960s and 1970s. Based on the hypertemporal analysis conducted by USGS for the extended project boundary, the land loss rate in the project area is -1.11% per year for the period 1984 to 2016. Shoreline erosion rates (1998-2015) range from 10 ft/yr along the eastern lake shoreline to 23 ft/yr along the southern lake shoreline.

# **Goals:**

The primary goals of this project are; 1) restore marsh habitat in the open water areas east and south of Catfish Lake, and 2) restore and protect the eastern and southern Catfish Lake shoreline.

The specific goals of this project are; 1) create 231 acres of marsh, 2) nourish 75 acres of marsh, 3) protect the marsh creation cells from shoreline erosion.

# **Proposed Solution:**

Sediments from Catfish Lake will be hydraulically dredged and pumped via pipeline to create/nourish 306 acres of marsh. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Containment dikes will be constructed around each marsh creation cell. Where practicable, material will be borrowed from perimeter oil/gas canals. Containment dikes will be gapped at the end of construction or by TY3. Approximately 2,566 linear feet of sheet pile wall will also be installed as a containment feature.

Approximately 12,479 linear feet of shoreline protection (gabion mattresses) will be installed along the lakeside boundary of the marsh creation cells on the constructed containment dikes.

# **Project Benefits:**

The project would result in approximately 243 net acres over the 20-year project life.

**Project Costs:** The total fully-funded cost is \$38,312,892.

# **Preparer of Fact Sheet:**

Kevin Roy, FWS, Kevin Roy@fws.gov, 337-291-3120



# PPL27 North Bayou Decade Ridge Restoration and Marsh Creation

# **Project Location:**

Region 3, Terrebonne Basin, Terrebonne Parish

# **Problem:**

The marshes along Bayou Decade have deteriorated dramatically over the past few decades. Coastal restoration actions have focused on improving hydrologic conditions in the area to reduce salinities and improve freshwater flows from the Atchafalaya River. Significant improvements have been made yet there are some areas of large open water that are slow to improve. Land loss in the project area is estimated to be -0.92%/y. Marsh creation would rapidly recover marshes along with protection afforded by elevation of ridge features on the north bank of the bayou.

# **Goals:**

The goal of the project is to create a ridge feature on the north bank of Bayou Decade and create adjacent marsh in a vast expanse of open water where marsh once existed.

# **Proposed Solution:**

The proposed project will create approximately 18,987 linear feet of ridge along north bank of Bayou Decade from Turtle Bayou to Voss Canal and create 20 acres of maritime forest habitat. The ridge habitat will be built behind an existing rock bankline that separates the bayou from the marsh creation cells. The structure will have a +4.0 elevation with a 7:1 slope on the bayou side and 5:1 slope on the marsh side. Additionally the newly created ridge will include herbaceous and woody plantings. Marsh creation will create approximately 280 acres and nourish approximately 19 acres of marsh using sediment dredged from Lake Mechant. Containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands.

# **Project Benefits:**

The project would result in approximately 267 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$36,196,906.

# **Preparer of Fact Sheet:**

Ron Boustany, ron.boustany@la.usda.gov, 337-291-3067



# **Candidate Projects Located in Region 4**

# PPL27 Sabine Marsh Creation Cycles 6&7

# **Project Location:**

Region 4, Calcasieu/Sabine Basin, Cameron Parish, Sabine National Wildlife Refuge

# **Problem:**

The area in the vicinity of Browns Lake within the Sabine National Wildlife Refuge experienced extensive loss of emergent wetlands directly related to hurricane activity in the 1950's and 1960's. Also the proximity of this area to the Calcasieu River Ship Channel (Ship Channel) has allowed saltwater intrusion and increased tidal exchange which has contributed to the more saline conditions and loss of emergent wetlands. More recently land loss rates within the project area have slowed and in some cases reversed. This is evidenced by the hyper-temporal analysis conducted by USGS for the extended project boundary, which shows a land gain in the project area estimated to be +0.62% per year for the period 1984 to 2016. This land gain was probably along the more western side of the projects extended boundary. The project area probably has some land loss due to the larger open water areas on the eastern side.

# **Goals:**

The primary goal of this project is to restore marsh habitat in open water and in deteriorated marsh by beneficially using material hydraulically dredged from the Ship Channel during the Corps routine maintenance events.

The specific goal of the project is to create approximately 900 acres of marsh and nourish 29 acres of marsh with material dredged from the Ship Channel in two Corps maintenance events.

# **Proposed Solution:**

This project consists of the creation of 900 acres and nourishment of 29 acres of marsh using material dredged from the Ship Channel. Marsh would be created during two Corps maintenance dredging events, each consisting of two marsh creation sites (Cycle 6 A&B – 478 ac and Cycle 7 A&B – 451 ac). Dredge material would be transported to the marsh creation sites utilizing the permanent pipeline that extends from the Ship Channel to the Sabine NWR. Earthen containment dikes and lower level earthen overflow weirs will be constructed to assist in the dewatering of each marsh creation disposal area and to create fringe marsh. Containment dikes will be gapped at the end of construction or by target year 3. The dredged slurry will be placed between elevations +4.0' and +4.5' MLG (consistent with the completed CS-28 Cycles 1-5) which have produced elevations conducive to the establishment of intertidal emergent marsh.

# **Project Benefits:**

The project would result in approximately 900 net acres over the 20-year project life.

# **Project Costs:**

The total fully-funded cost is \$27,914,651.

# **Preparer of Fact Sheet:**

Robert Dubois, FWS, Robert\_Dubois@fws.gov, 337-291-3127



11/15/2017

# **PPL27** Candidate Project Evaluation Matrix

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Total Fully Funded Cost	Fully- Funded Phase I Cost	Fully-Funded Phase II Cost incl O&M	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
Point aux Marchettes Shoreline Protection	1	St. Bernard	275	34	138	\$42,889,765	\$2,251,675	\$40,638,090	\$2,214,676	\$65,138	\$310,795
Bayou Cane Marsh Creation	1	St. Tammany	449	112	356	\$33,991,838	\$3,239,930	\$30,751,908	\$2,118,309	\$18,913	\$95,483
East Delacroix Marsh Creation and Terracing	2	St. Bernard	597	138	307	\$35,821,393	\$3,455,773	\$32,365,620	\$2,245,088	\$16,269	\$116,682
Mid Breton Landbridge Marsh Creation and Terracing	2	Plaquemines	792	121	364	\$40,874,564	\$3,715,463	\$37,159,101	\$2,544,825	\$21,032	\$112,293
Breton Landbridge Marsh Creation (West)	2	Plaquemines	423	122	282	\$34,661,276	\$3,649,241	\$31,012,035	\$2,199,458	\$18,028	\$122,912
Grand Bayou Ridge and Marsh Restoration	2	Plaquemines	369	155	304	\$40,122,416	\$3,338,322	\$36,784,094	\$2,501,288	\$16,137	\$131,982
Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection	2	Jefferson	687	183	372	\$44,109,317	\$3,952,451	\$40,156,866	\$2,743,290	\$14,991	\$118,573
East Catfish Lake Marsh Creation and Shoreline Protection	3	Lafourche	306	129	243	\$38,312,892	\$3,106,745	\$35,206,147	\$2,324,662	\$18,021	\$157,666
North Bayou Decade Ridge Restoration and Marsh Creation	3	Terrebonne	319	90	267	\$36,196,906	\$3,305,878	\$32,891,028	\$2,253,022	\$25,034	\$135,569
Sabine Marsh Creation Cycles 6&7	4	Cameron	929	346	006	\$27,914,651	\$3,824,731	\$24,089,920	\$1,672,868	\$4,835	\$31,016

Caastal Wetlanc	ls Planning, Protection and Restoration Act
Jechnica	l Committee Meeting Announcement
Date:December 7, 2017Time:9:30 a.m.Time:9:30 a.m.Location:LA Dept of Natural I LaSalle Bldg (LaBe) 617 N Third Street Baton Rouge, Louis	Technical Committee Meeting   The evaluation results will be presented for all the PPL 27   Resources The evaluation results will be presented for all the PPL 27   Resources candidate projects. The public is invited to attend and provide comments on the candidate projects. The Technical Committee will vote & recommend projects for PPL 27 selection. The will vote & recommend projects for PPL 27 selection. The siana   Isometry Technical Committee will also consider requests for construction (Phase II) approvals.
<image/> <image/>	Written comments may be provided no later than November 30, 2017 to the CWPPRA Task Force by mail or email to: Colonel Michael Clancy District Engineer, New Orleans c/o: Brad Inman U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, Louisiana 70118 Email: Brad.L.Inman@usace.army.mil